

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 03S0711P	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/JP 03/09958	International filing date (day/month/year) 05/08/2003	(Earliest) Priority Date (day/month/year) 09/08/2002
Applicant CASIO COMPUTER CO., LTD.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.
☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

- ☒ as suggested by the applicant.
- ☐ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/09958

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01L23/538 H01L25/10 H01L23/31

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02 27786 A (IBIDEN CO LTD ;WANG DONGDONG (JP); SAKAMOTO HAJIME (JP)) 4 April 2002 (2002-04-04) abstract; figures 1-69 & EP 1 321 980 A (IBIDEN CO LTD) 25 June 2003 (2003-06-25) embodiments 1-5 ---	1-19, 22-38
X	US 6 159 767 A (EICHELBERGER CHARLES WILLIAM) 12 December 2000 (2000-12-12) column 8, line 62 -column 15, line 15; figures 5-9 ---	1-38
X	WO 92 17901 A (INTEGRATED SYSTEM ASSEMBLIES) 15 October 1992 (1992-10-15) abstract; figures 1-32 ---	1-38
	--- -/--	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the international search

29 March 2004

Date of mailing of the international search report

06/04/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Schumacher, H

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 03/09958

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 423 570 B1 (MA QING ET AL) 23 July 2002 (2002-07-23) column 3, line 38 -column 7, line 33; figures 1-17 -----	1-5, 8-15,17, 22-38
X	US 6 154 366 A (LI JIAN ET AL) 28 November 2000 (2000-11-28) abstract; figures 1-4 -----	1-4, 7-10, 15-17, 22-25

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 03/09958

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0227786	A	04-04-2002	CN 1466777 T	07-01-2004
			EP 1321980 A1	25-06-2003
			WO 0227786 A1	04-04-2002
			JP 2002170840 A	14-06-2002
			TW 546999 B	11-08-2003
			US 2004014317 A1	22-01-2004
			JP 2002170827 A	14-06-2002
			JP 2002246756 A	30-08-2002
			JP 2002246504 A	30-08-2002
			JP 2002246757 A	30-08-2002
			JP 2002246761 A	30-08-2002
<hr/>				
US 6159767	A	12-12-2000	US 5841193 A	24-11-1998
<hr/>				
WO 9217901	A	15-10-1992	AU 648417 B2	21-04-1994
			AU 1874392 A	02-11-1992
			CA 2106872 A1	28-09-1992
			EP 0577779 A1	12-01-1994
			JP 6502744 T	24-03-1994
			WO 9217901 A1	15-10-1992
			US 5250843 A	05-10-1993
<hr/>				
US 6423570	B1	23-07-2002	US 2002127780 A1	12-09-2002
			US 2002127769 A1	12-09-2002
<hr/>				
US 6154366	A	28-11-2000	NONE	
<hr/>				